

REMARKS

Applicants have carefully reviewed the final Office Action mailed August 17, 2010, and thank Examiner Fernandez for her review of the pending claims. In the Office Action, Claims 1-11 and 13-43 were rejected. In this response, new Claim 44 is added and is supported by the application as filed. No new matter is added.

At least for the reasons set forth below, Applicants respectfully traverse the rejections. Further, Applicants believe that there are also reasons other than those set forth below why the pending claims are patentable, and reserves the right to set forth those reasons, and to argue for the patentability of claims not explicitly addressed herein, in future papers. Applicants respectfully request reconsideration of the present application in view of the above amendments and the following remarks.

In view of the following arguments, any pending claims are believed to be in condition for allowance. Therefore, this Response is believed to be a complete response to the Office Action. However, Applicants reserve the right to set forth further arguments supporting the patentability of their claims, including the separate patentability of claims not explicitly addressed herein, in future papers.¹

Amendment of the claims, if any, is not an acknowledgement or admission that Applicants believe that they are somehow not entitled to broader protection and are made without prejudice or disclaimer. Any amendment has been made solely to facilitate allowance of the present application. Applicants reserve the right to continue prosecution in one or more later filings.

¹ As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants' silence as to assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, assertions as to dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute such assertions/requirements in the future.

REJECTION OF CLAIMS UNDER 35 USC § 102

The Examiner rejected claims 10, 11, 13, 14, 16-18, and 20 under 35 U.S.C. §102(b) as being anticipated by Kindzelskii et al. (Biochimica et Biophysica Acta. 2000. 1495: 90-111)(“Kindzelskii”) in light of *Journal of Cell Science* (2001) 114: 1515-1520. The rejection is traversed.

To anticipate a claim, the reference must teach every element of the claim. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)(emphasis added).

The cited reference, Kindzelskii, does not meet these requirements. Independent Claim 1 claims:

A method for converting the shape of polarized eukaryotic cells to spherical morphology, comprising the steps of:

determining a frequency of internal NAD(P)H oscillation within the polarized eukaryotic cells, and

applying a pulsed electric field to the cells,

wherein the field strength of said electric field is at least 10^{-5} volts/meter and application of said electric field causes at least one of the polarized eukaryotic cells to assume spherical morphology.

In addition, independent Claim 16 claims:

A method for converting the shape of polarized eukaryotic cells to spherical morphology, comprising the steps of:

determining a frequency of internal NAD(P)H oscillation with the polarized eukaryotic cells, and

applying a pulsed electric field to the cells, where:

the electric field has a frequency within ten per cent of the frequency of the internal NAD(P)H oscillation within the cells, and
the field strength of the electric field is at least 10^{-5} volts/meter,
and wherein application of the pulsed electric field causes at least one of the polarized eukaryotic cells to assume spherical morphology.

Applicants respectfully assert that nowhere does the cited reference, Kindzelskii, teach “[t]he identical invention ...in as complete detail as is contained in the ... claim.” *Richardson, supra*, 868 F.2d at 1236 (emphasis added). Nowhere does Kindzelskii appear to teach the claimed methods of effecting the conversion of the shape of polarized eukaryotic cells to spherical morphology by implementing and following each and every step and limitation of the methods as claimed. Therefore, Kindzelskii does not anticipate independent Claims 10 and 16, or any of their respective dependent claims. For at least these reasons and the reasons set out in Applicants’ previous response (which is hereby incorporated), Applicants respectfully request that the rejection under Section 102 be withdrawn and that Claims 10 and 16 and their respective dependent Claims 11, 13, 14, 17-18, and 20, be allowed as written.

REJECTION OF CLAIMS UNDER 35 USC § 103

Claims 1-11, 13-20, and 38-41 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rosenpire et al. (Biophysical Journal. 2000. 79(6): 3001-3008)(“Rosenspire”) in view of Kindzelskii, *supra*, and U.S. Patent No. 4,758,429 (“Gordon”). The rejections are hereby traversed.

To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580 (CCPA 1974). *See also Litton Systems, Inc. v. Honeywell, Inc.*, 87 F.3d 1559, 1569 (Fed. Cir. 1996) (rejecting defendants’ obviousness challenge on the grounds that “[t]he prior art simply does not contain many limitations contained in the claimed method”); Manual of Patent Examining Procedure (MPEP) at § 2143.03; *accord* M.P.E.P. § 706.02(j). Moreover, the mere fact that references can be combined or modified does not render the resulting combination obvious unless the prior art also

suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q. 2d 1430 (Fed. Cir. 1990).

The case law “makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for showing of the teaching or motivation to combine prior art references.” *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999); see also *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 665 (Fed. Cir. 2000). This is because “[c]ombining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor’s disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.” *Dembiczak*, 175 F.3d at 999. Thus, it is established law that one “cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.” *Ecolchem, Inc. v. Southern Cal. Edison Co.*, 227 F.3d 1361, 1371, 56 USPQ2d 1065 (Fed. Cir. 2000) (citing *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1780, 1783 (Fed. Cir. 1988)).

Applicants respectfully assert that Rosenspire, Kindzelskii, and/or Gordon, by themselves or in any combination, do not meet the requirements of Section 103.

The Office Action admits that none of Rosenspire, Kindzelskii, and/or Gordon contains all elements of the claims at issue. Nonetheless, with the present claims in hand, the Office Action appears to selectively read the cited references and to choose individual statements out of their contexts in those references to find all elements of the claims at issue. Yet even then the Office Action fails to establish a *prima facie* case of obviousness by not setting out where the art indicates why the combination of such inappropriately selected statements is desirable, and/or by finding motivation only by reference to a purported desire to control ROM production so as to cease ROM production (Office Action at 7), a goal that does not disclose or bear directly on changing cell morphology, as set out in the present claims. Applicants respectfully assert that such an approach is improper hindsight and does not establish a *prima facie* case of obviousness under Section 103. *Dembiczak*, 175 F.3d at 999. For at least these reasons and the reasons set out in Applicants’ previous response (which is hereby incorporated), Applicants respectfully request that the rejections

of Claims 1-11, 13-20, and 38-41 under Section 103 be withdrawn and the claims be allowed as written.

Claims 21, 22, 24-26, and 31 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gordon, and Claims 21-37, 42, and 43 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gordon in view of U.S. Patent No. 5,968,527 (“Litovitz”). The rejections are hereby traversed.

Gordon cannot properly serve by itself as a basis for Section 103 rejection of Claims 21, 22, 24-26, and 31, or in combination with Litovitz, as a basis for Section 103 rejection of Claims 21-37, 42, and 43. For example, independent Claim 21 claims:

A method of mitigating an inflammatory condition in a mammal, comprising the step of: applying an electric field of sinusoidal frequency to a tissue comprising an inflammatory condition of the mammal, wherein the field strength of the electric field within tissue comprises at least 10^{-2} volts/meter.

In contrast, due to the nature of its subject matter and disclosure, Gordon is nonanalogous art to which one of ordinary skill would not look to with respect to the claimed invention and which cannot be properly combined with any other cited reference to state a *prima facie* case of obviousness. See *Wang Laboratories, Inc. v. Toshiba Corp. et al.*, 993 F.2d 858, 865 (Fed. Cir. 1993); *In Re Hans Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992) (“The combination of elements from nonanalogous sources, in a manner that reconstructs the applicant’s invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness”); see also MPEP §2141.01(a). Gordon contains no teaching which one of ordinary skill would consider instructive to the claims under consideration, and indeed Gordon teaches away from the present claims. Gordon teaches only with respect to introducing, into cells of joints under treatment, particles that are taken up by the cells, then applying energy to the cells in order to affect the behavior of the particles so that the particles cause accumulation of heat energy, effecting therapeutic changes in the cells and/or tissue under treatment. The particles of Gordon are themselves invasive and reactive, causing changes, including potential immunogenic changes, to the targeted cells and tissues.

However, embodiments of the present invention do not depend on the intracellular uptake of particles and induction of changes in the target cells by application of energy to the particles; unlike the present claims, Gordon contains no teaching of effecting a change in targeted tissue without the use of energy-absorbing particles which induce changes in the affected target cells. Thus, Gordon is nonanalogous art that teaches away from the claimed invention, it has no relevance to the present claims, and one of ordinary skill in the art reading Gordon would find no disclosure or motivation to apply said electric field without the particles of Gordon.

Gordon does not support rejection of any claims under Section 103, either by itself or in combination with any other reference, including but not limited to, with Litovitz. For at least these reasons, the Section 103 rejection of Claims 21 – 37 and 42 over Gordon and/or Litovitz should be withdrawn and the claims allowed as written.

NEW CLAIM 44

New Claim 44 is supported by the specification (e.g., Para. 40) and adds no new matter. Allowance of the claim as written is respectfully requested.

CONCLUSION

All rejections have been addressed. In view of the above, the claims are believed to be in condition for allowance. Accordingly, reconsideration and allowance are respectfully requested and the Examiner is respectfully requested to pass this application to issue.

It is believed that any fees associated with the filing of this paper have already been identified in any transmittal accompanying this paper. However, if any additional fees are required in connection with the filing of this paper that are not identified in any accompanying transmittal, permission is given to charge Deposit Account No. 18-0013 under Order No.66174-0006 in the name of Rader, Fishman and Grauer PLLC, from which the undersigned is authorized to draw.

If the Examiner has any comments or questions, she is kindly urged to call the undersigned to facilitate prosecution.

Dated: February 17, 2011

Respectfully submitted,

Electronic signature: /James F. Kamp/
James F. Kamp
Registration No.: 41,882
RADER, FISHMAN & GRAUER PLLC
Correspondence Customer Number: 10291
Attorney for Applicants